

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
REGION 9, SAN DIEGO REGION**

**WASTE DISCHARGE REQUIREMENTS  
ORDER NO. R9-2005-0095  
NPDES PERMIT NO. CA0109011**

The Discharger listed in *Table 1. Discharger Information*, shall comply with the Waste Discharge Requirements set forth in this Order:

**Table 1. Discharger Information.**

<b>Discharger</b>	<b>Mark Stiefel</b>
<b>Name of Facility</b>	<b>Jack and Mark Stiefel Dairy</b>
<b>Facility Address</b>	<b>32750 Holland Road</b>
	<b>Winchester, CA 92596</b>
	<b>Riverside County</b>

The conditions and prohibitions established in this Order are applicable to the discharge of wastes from the following location listed in *Table 2. Discharge Location*:

**Table 2. Discharge Location**

<b>Facility Location</b>	<b>Effluent Description</b>	<b>Discharge Point Latitude</b>	<b>Discharge Point Longitude</b>	<b>Receiving Water</b>
Stiefel Dairy	Milking parlor and feed lane washwater, and storm water from production areas	33 ° 39' 50.8" N	117 ° 05' 42.5" W	Domenigoni Subarea (902.35) of the Murrieta Hydrologic Area (902.30) of the Santa Margarita Hydrologic Unit (902.00)

The adoption date, effective date, and expiration date for this Order are listed in *Table 3. Order Information*.

**Table 3. Order Information**

This Order was adopted by the Regional Board on:	<b>April 13, 2005</b>
This Order shall become effective on:	<b>April 23, 2005</b>
This Order shall expire on:	<b>April 13, 2010</b>
The U.S. Environmental Protection Agency (U.S. EPA) and the Regional Board have classified this discharge as a <b>minor</b> discharge.	
The Discharger shall file a Report of Waste Discharge in accordance with Title 23, California Code of Regulations, <b><u>not later than October 15, 2009</u></b> , as application for issuance of new Waste Discharge Requirements.	

IT IS HEREBY ORDERED, that Order No. 2000-18 is superseded upon the effective date of this Order except for enforcement purposes, and, in order to meet the provisions contained in Division 7 of the CWC and regulations adopted thereunder, and the provisions of the federal CWA, and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements herein.

I, John H. Robertus, Executive Officer, do hereby certify that Order No. R9-2005-0095 is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Diego Region, on April 13, 2005

Tentative  
JOHN H. ROBERTUS, Executive Officer

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD**

## REGION 9, SAN DIEGO REGION

**ORDER NO. R9-2005-0095**  
**NPDES NO. CA0109011**

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## I. FACILITY INFORMATION

The following Discharger listed in *Table 4. Facility Information*, is regulated pursuant to the conditions set forth in this Order.

**Table 4. Facility Information.**

Discharger	Stiefel Dairy
Name of Facility	Stiefel Dairy
Facility Address	32750 Holland Road
	Winchester, CA 92596
	Riverside County
Facility Contact, Title, and Phone	Mark Stiefel, Owner/Operator, (951) 926-1247
Mailing Address	Marcia Crouse 32750 Holland Road Winchester, CA 92596
Type of Facility	CAFO (Diary Farm)
Facility Design Capacity	1,500 Milking Cows

## II. FINDINGS

The California Regional Water Quality Control Board, San Diego Region (hereinafter Regional Board), finds:

- A. **Background.** Stiefel Dairy (hereinafter Discharger) is currently discharging under Order No. 2000-18, National Pollutant Discharge Elimination System (NPDES) Permit No. CA0109011. The Discharger submitted a Report of Waste Discharge, dated October 20, 2004, and applied for a NPDES permit renewal to operate a concentrated animal feeding operation (CAFO).
- B. **Facility Description.** The Discharger owns and operates a Dairy Farm. Cows are washed prior to milking in a paved holding area adjacent to the milking parlor. Washing occurs twice a day. The Discharger estimates that a maximum volume of 50 gallons per day of wastewater is produced per milking cow. The facility utilizes an iodine solution for bacterial control. After milking, the cows are led back to the corrals and the milking parlor is washed down.

Wash waters from the milking parlor are collected in sumps and pumped to one of the flush water storage tanks. The flush water is used to clean or “flush” out the paved cattle feed lanes to remove manure and other wastes from the lanes. The flush water is collected in the slurry collection sump at the south end of the feed lanes and is pumped through a manure separator to remove the solids. The manure is stored in a pile at the south end of the facility, and the flush water filtrate discharges via an underground sewer to the wastewater detention lagoons for storage. Storm water runoff from the corrals, hay storage area, feed additive storage bins, the center corridor, manure storage pile, and paved areas of the facility are discharged via an underground sewer system to the wastewater detention lagoons during a storm event. Storm water from off-site is diverted by drainage ditches around the facility.

There are two clay-lined main wastewater detention lagoons (north and south) with a total storage capacity of approximately 14 acre-feet. Wastewater and storm water from facility operations first discharge to the south lagoon. The south lagoon is equipped with two aerators to aid in further solids settling prior to reuse. Solids are allowed to settle out in the north lagoon prior to being directed to the flush tanks or used for irrigation on 15 acres of pastureland (120 acres are available if needed). The facility occasionally uses a third detention lagoon system, consisting of 3 ponds arranged in series for an additional storage capacity of 18.6 acre-feet (for a total of 32.6 acre-feet). As demonstrated in Attachment G, the facility has sufficient wastewater storage capacity to contain runoff from the production area for a 24-hour, 25-year storm event and wastewater produced on-site for 60-days.

Water troughs are located at one end of each corral. The rectangular troughs are approximately 20 feet by 8 feet, and are equipped with auto shutoff devices to prevent overflowing. Hay is stored on concrete and dirt in the center corridor between the northern corrals. Feed additives (almond hulls, bakery wastes) are stored in covered bins at the north end of the facility. Attachment B provides a facility map of the area around the facility. Attachment C provides a wastewater flow schematic of the facility.

- C. **Legal Authorities.** This Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and Chapter 5.5, Division 7 of the California Water Code (CWC). It shall serve as a National Pollutant Discharge Elimination System (NPDES) permit for point source discharges from this facility to surface waters. This Order also serves as Waste Discharge Requirements pursuant to Article 4, Chapter 4 of the CWC.

Pursuant to the CWA, all Concentrated Animal Feeding Operations (CAFOs) are point sources and are subject to NPDES permitting requirements. 40 CFR of Federal Regulations (CFR) Parts 9, 122, 123, and 412 establish regulations and effluent limitation guidelines for CAFOs. 40 CFR Part 122.23 defines a Large Concentrated Animal Feeding Operation (Large CAFO) as any animal feeding operations that has more than 700 mature dairy cows, whether milked or dry. The current number of milking cows (975) at the dairy classifies the dairy as a Large CAFO. Once defined as a Large CAFO all of the waste generated by the operation is subject to the applicable requirements of 40 CFR Parts 122 and 412.

- D. **Background and Rationale for Requirements.** The Regional Board developed the requirements in this Order based on information submitted as part of the application, through the Monitoring and Reporting Program and through special studies. Attachments A through H contain background information and detailed rationale for Order requirements and are hereby incorporated into this Order and constitute part of the Findings for this Order.
- E. **California Environmental Quality Act (CEQA).** This action to adopt an NPDES permit is exempt from the provisions of the California Environmental Quality Act (Public Resources Code Section 21100, et seq.) in accordance with Section 13389 of the CWC.
- F. **Technology-based Effluent Limitations.** The Code of Federal Regulations (CFR) at 40 CFR 122.44(a) requires that permits include applicable technology-based limitations and standards. This Order includes technology-based effluent limitations based on Effluent Limitations Guidelines and Standards for the Concentrated Animal Feeding Operations Category in 40 CFR

412. A detailed discussion of the technology-based effluent limitations development is included in the Fact Sheet (Attachment F).

- G. Threat to Water Quality and Complexity.** Pursuant to Title 23, Division 3, Chapter 9, Article 1, Section 2200 of the California Code of Regulations (CCR), this Regional Board has assigned a Threat to water quality (TTWQ) and complexity (CPLX) to the Discharger. The Discharger is assigned a TTWQ of Category 2, and a CPLX of Category C.
- H. Water Quality-Based Effluent Limitations.** Section 122.44(d) of 40 CFR requires that permits include water quality-based effluent limitations (WQBEL) to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water. Where numeric water quality objectives have not been established, 40 CFR §122.44(d) specifies that WQBEL may be established using USEPA criteria guidance under CWA section 304(a), proposed State criteria or a State policy interpreting narrative criteria supplemented with other relevant information, or an indicator parameter.
- I. Water Quality Control Plans.** The Regional Board adopted a Water Quality Control Plan for the San Diego Region (hereinafter Basin Plan), On September 8, 1994. The Basin Plan designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. In addition, State Water Resources Control Board (State Board) Resolution No. 88-63 requires that, with certain exceptions, the Regional Board assign the municipal and domestic supply use to water bodies that do not have beneficial uses listed in the Basin Plan. Beneficial uses applicable to the Domenigoni Subarea (902.35) of the Murrieta Hydrologic Area (902.30) of the Santa Margarita Hydrologic Unit (902.00) are listed in *Table 5. Beneficial Uses*.

**Table 5. Beneficial Uses.**

Receiving Water Name	Beneficial Use(s)
Ground waters(s) in the Domenigoni Subarea (902.35) of the Murrieta Hydrologic Area (902.30) of the Santa Margarita Hydrologic Unit (902.00)	<u>Existing:</u> Municipal (MUN); Agricultural Supply (AGR); Industrial Service Supply (IND); and Industrial Process Supply (PROC). <u>Intermittent:</u> None. <u>Potential:</u> None.

This Order specifically implements the applicable requirements of the Basin Plan.

- J. Compliance Schedules and Interim Requirements.** This Order does not include compliance schedules and interim effluent limitations and discharge specifications.
- K. Antidegradation Policy.** Section 131.12 of 40 CFR requires that State water quality standards include an antidegradation policy consistent with the federal policy. The State Board established California's antidegradation policy in State Board Resolution No. 68-16, which incorporates the requirements of the federal antidegradation policy. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. As

discussed in detail in the Fact Sheet, the permitted discharge is consistent with the antidegradation provision of 40 CFR §131.12 and State Board Resolution No. 68-16.

- L. **Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at 40 CFR § 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. All discharge prohibitions in this Order are as stringent as the effluent limitations in the current Order.
- M. **Monitoring and Reporting.** Section 122.48 of 40 CFR requires all NPDES permits to specify requirements for recording and reporting monitoring results. Sections 13267 and 13383 of the CWC authorize the Regional Boards to require technical and monitoring reports. The Monitoring and Reporting Program establishes monitoring and reporting requirements to implement federal and state requirements. This Monitoring and Reporting Program is provided in Attachment E.
- N. **Standard and Special Provisions.** Standard Provisions, which in accordance with 40 CFR 122.41 and 122.42 apply to all NPDES discharges and must be included in every NPDES permit, are provided in Attachment D. The Regional Board has also included in this Order special provisions applicable to the Discharger. In accordance with 40 CFR 122.42 the Discharger shall develop and implement a nutrient management plan (NMP). A detailed rationale for the special provisions contained in this Order is provided in the attached Fact Sheet.
- O. **Notification of Interested Parties.** The Regional Board has notified the discharger and interested agencies and persons of its intent to prescribe Waste Discharge Requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of notification are provided in the Fact Sheet of this Order.
- P. **Consideration of Public Comment.** The Regional Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in the Fact Sheet of this Order.

### III. DISCHARGE PROHIBITIONS

- A. The discharge of wastewater, or storm water from production areas to any surface water bodies or tributary thereof is prohibited.
- B. The discharger shall not cause pollution, contamination, or nuisance as those terms are defined in CWC Section 13050, as a result of the treatment, storage or discharge of wastes.
- C. Discharges of wastes, including windblown spray and runoff of effluent applied for irrigation, to lands which have not been specifically described to the Regional Board and for which valid Waste Discharge Requirements are not in force, are prohibited.
- D. The discharge of any radiological, chemical or biological warfare agent, or radioactive waste to waters of the United States is prohibited.

- E. The dumping or deposition of oil or trash in any manner that may permit it to be washed into waters of the United States is prohibited.
- F. The discharge of facility wastewater shall not exceed a volume that is attributable to a mature milking cow herd size of 1,500 cows being milked twice per day unless the discharger submits for approval by the Regional Board a report certifying that the dairy has adequate facilities for a higher discharger volume.
- G. The use of manure as a fertilizer in any area that may affect a groundwater sub basin lacking assimilative capacity is prohibited unless a plan that mitigates the effects of that use on the underlying groundwater sub basin is implemented with prior approval from this Regional Board.
- H. Discharges of facility wastewater to disposal fields or crop lands shall not result in surface runoff from disposal fields and shall be managed to minimize percolation to ground water. Manure and wastewater must be applied consistent with a site-specific NMP as specified in Part VI.C.3 of this Order.
- I. The wastewater or waste solids disposal operation shall not cause unusual odors or other nuisance beyond the limits of the dairy property.
- J. The Discharger shall comply with the waste discharge prohibitions contained in the Basin Plan.

#### **IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS**

- A. Effluent Limitations – (Not Applicable)**
- B. Land Discharge Specifications – (Not Applicable)**
- C. Reclamation Specifications (Not Applicable)**

#### **V. RECEIVING WATER LIMITATIONS**

- A. Surface Water Limitations (Not Applicable)**
- B. Groundwater Limitations**

- 1. The storage and handling of animal waste, and generated wastewater, and the irrigation of land with animal waste and generated wastewater, shall not cause the TDS concentration of the ground water to exceed 2,000 mg/L.

#### **VI. PROVISIONS**

##### **A. Standard Provisions**

- 1. **Federal Standard Provisions.** The following sections of 40 CFR are incorporated into this permit by reference and are included in Attachment D to this Order:

- a. 122.5 *Effect of a permit*
  - b. 122.21 *Application for a permit*
  - c. 122.22 *Signatories to permit applications and reports*
  - d. 122.41 *Conditions applicable to all permits*
  - e. 122.61 *Transfer of permits*
  - f. 122.62 *Modification or revocation of permits*
  - g. 122.63 *Minor modifications of permits*
  - h. 122.64 *Termination of permits*
2. **Regional Board Standard Provisions.** The Discharger shall comply with the following provisions:
- a. Neither the treatment nor the discharge of waste shall create a pollution, contamination, or nuisance as defined by Section 13050 of the California Water Code (CWC).
  - b. The provisions of this Order are severable, and if any provision of this Order, or the application of any provision of this Order to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this Order, shall not be affected thereby.
  - c. Upon application by any affected person, or on its own motion, the Regional Board may review and revise this permit.
  - d. The discharger shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this Order, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the noncompliance.
  - e. The Porter-Cologne Water Quality Control Act provides for civil and criminal penalties comparable to, and in some cases greater than, those provided for under the CWA.

Nothing in this Order shall be construed to protect the discharger from its liabilities under federal, state, or local laws. Except as provided for in 40 CFR 122.41(m) and (n), nothing in this Order shall be construed to relieve the discharger from civil or criminal penalties for noncompliance.

Nothing in this Order shall be construed to preclude the institution of any legal action or relieve the discharger from any responsibilities, liabilities, or penalties to which the discharger is or may be subject to under Section 311 of the CWA.

Nothing in this Order shall be construed to preclude institution of any legal action or relieve the discharger from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authoring preserved by Section 510 of the CWA.

- f. Any noncompliance with this permit constitutes violation of the CWC and/or the CWA and is grounds for denial of an application for permit modification.
- g. No discharge of waste into waters of the state, whether or not the discharge is made pursuant to Waste Discharge Requirements, shall create a vested right to continue the discharge. All discharges of waste into waters of the state are privileges, not rights.
- h. For the purposes of this permit, the term “permittee” used in parts of 40 CFR incorporated into this permit by reference and/or applicable to this permit shall have the same meaning as the term “discharger” used elsewhere in this permit.
- i. After this permit expires, the terms and conditions of this permit are automatically continued pending issuance of a new permit if all requirements of the federal NPDES regulations on the continuation of expired permits are complied with.
- j. Any application submitted by the discharger for reissuance or modification of this permit shall satisfy all applicable requirements specified in federal regulations as well as any additional requirements for submittal of a Report of Waste Discharge specified in the CWC and the California Code of Regulations (CCR).
- k. Except as provided for in 40 CFR 122.7, no information or documents submitted in accordance with or in application for this permit will be considered confidential, and all such information and documents shall be available for review by the public at the office of the Regional Board.
- l. The discharger shall conduct appropriate analyses on any sample provided by U.S. EPA as part of the discharge monitoring quality assurance (DMQA) program. The results of such analyses shall be submitted to U.S. EPA’s DMQA manager.
- m. The handling, transport, treatment, or disposal of waste or the discharge of waste to waters of the state in a manner, which causes or threatens to cause a condition of pollution, contamination, or nuisance, as those terms are defined in CWC 13050, is prohibited.
- n. The discharger shall comply with any interim effluent limitations as established by addendum, enforcement action or revised Waste Discharge Requirements, which have been or may be adopted by this Regional Board.
- o. A copy of this Order shall be maintained on-site at the facility, and shall be available to operating personnel at all times.

- p. This Order shall become effective 10 days after the date of its adoption, provided the U.S. EPA Regional Administrator has no objection. If the Regional Administrator objects to its issuance, this Order shall not become effective until such objection is withdrawn.
- q. **This Order expires on April 13, 2010.** However, it will continue in force and effect until superseded by a new permit or rescinded.
- r. This Order does not apply to discharges of radioactive materials regulated under the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 et seq.).

## **B. Monitoring and Reporting Program Requirements**

The Discharger shall comply with the Monitoring and Reporting Program Attachment E, and future revisions thereto, in Attachment E of this Order.

## **C. Special Provisions**

### **1. Re-opener Provisions**

This Order may be modified, revoked and reissued, or terminated for cause including, but not limited to, the following:

- a. Violation of any terms or conditions of this Order;
- b. Obtaining this Order by misrepresentation or failure to disclose fully all relevant facts;
- c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

The filing of a request by the discharger for modifications, revocation and reissuance, or termination of this Order, or a notification of planned change in or anticipated noncompliance with this Order does not stay any condition of this Order.

- d. If any applicable toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under Section 307(a) of the CWA for a toxic pollutant and that standard or prohibition is more stringent than any limitation on the pollutant in this Order, the Regional Board may institute proceedings under these regulations to modify or revoke and reissue the Order to conform to the toxic effluent standard or prohibition.
- e. This Order may be reopened and modified, to incorporate in accordance with the provisions set forth in 40 CFR Parts 122 and 124, to include requirements for the implementation of the watershed management approach.

- f. This Order may be reopened and modified, in accordance with the provisions set forth in 40 CFR Parts 122 and 124, to include new Minimum Levels (ML).
- g. This Order may be reopened and modified to revise effluent limitations as a result of future Basin Plan Amendments, or the adoption of a total maximum daily load allocation (TMDL).
- h. This Order may be reopened upon submission by the Discharger of adequate information, as determined by the Regional Board, to provide for dilution credits or a mixing zone, as may be appropriate.
- i. This Order may be reopened and modified to revise the toxicity language once that language becomes standardized.
- j. This Order may also be reopened and modified, revoked, and reissued or terminated in accordance with the provisions of 40 CFR sections 122.44, 122.62 to 122.64, 125.62, and 125.64. Causes for taking such actions include, but are not limited to, failure to comply with any condition of this Order and permit, and endangerment to human health or the environment resulting from the permitted activity.

## **2. Special Studies, Technical Reports and Additional Monitoring Requirements (Not Applicable)**

Core monitoring may include intake monitoring, effluent monitoring, receiving water monitoring, and groundwater monitoring. This Order includes core monitoring for groundwater. In addition to the core monitoring requirements, the Discharger may be required to conduct the following monitoring requirements:

### **a. Regional Watershed Monitoring**

The Discharger shall participate and coordinate with state and local agencies and other dischargers in the San Diego Region in development and implementation of a regional monitoring program as directed by the Regional Board. The intent of a regional monitoring program is to maximize the efforts of all monitoring partners using a more cost-effective monitoring design and to best utilize the pooled resources of the region. During a coordinated ocean sampling effort, the Discharger's monitoring program effort may be expanded to provide a regional assessment of the impact of discharges to the receiving water.

### **b. Special Studies**

Special studies are intended to be short-term and designed to address specific research or management issues that are not addressed by the routine core-monitoring program. The Discharger shall implement special studies as directed by this Regional Board.

### **3. Nutrient Management Plan (NMP) and Best Management Practices (BMP)**

In accordance with 40 CFR 122.42 the Discharger shall develop and implement a NMP. At a minimum, a NMP must include BMPs and procedures necessary to implement applicable effluent limitations and standards. The BMPs shall consider the facility construction, operation and maintenance requirements specified in Section VI.C.5. of this Order. The NMP must, to the extent applicable:

- a. Ensure adequate storage of manure, litter, and process wastewater, including procedures to ensure proper operation and maintenance of the storage facilities.
- b. Ensure proper management of mortalities (*i.e.*, dead animals) to ensure that they are not disposed of in a liquid manure, storm water, or process wastewater storage or treatment system that is not specifically designed to treat animal mortalities.
- c. Ensure that clean water is diverted, as appropriate, from the production area.
- d. Prevent direct contact of confined animals with waters of the United States.
- e. Ensure that chemicals and other contaminants handled on-site are not disposed of in any manure, litter, process wastewater, or storm water storage or treatment system unless specifically designed to treat such chemicals and other contaminants.
- f. Identify appropriate site specific conservation practices to be implemented, including as appropriate buffers or equivalent practices, to control runoff of pollutants to waters of the United States.
- g. Identify protocols for appropriate testing of manure, litter, process wastewater, and soil in accordance with 40 CFR 412.4 (c).
- h. Establish protocols to land apply manure, litter or process wastewater in accordance with site specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the manure, litter or process wastewater as specified in 40 CFR 412.4 (c). The established protocols to handle, store, and apply manure or process wastewater shall at a minimum, be as stringent as the protocols specified in the NRCS's, "Conservation Practice Standard, Nutrient Management, Code 590".
- i. Identify specific records that will be maintained to document the implementation and management of the minimum elements described in paragraphs 3.a through 3.h of this section.

Further, the NMP shall comply with Attachment H to Order No. R9-2005-0095.

### **4. Compliance Schedules**

Prior to December 31, 2006, the Discharger shall develop and implement an updated NMP in accordance with 40 CFR 122.42(e) and Section VI.C.3. of this Order. Upon completion of the NMP, the Discharger shall submit a copy of the NMP to the Regional Board for review.

## **5. Construction, Operation and Maintenance Specifications**

Unless otherwise specified, the following facility design and operations requirements shall be implemented by the Discharger:

### **a. Facility Management**

- i. The Discharger shall, at all times, properly operate and maintain all facilities and systems of waste disposal (and related appurtenances) which are installed or used by the Discharger to achieve compliance with the conditions of this Order. Proper operations and maintenance include the routine inspection, maintenance, and repair of drainage channels, culverts, ponds, irrigation equipment and related wastewater or runoff collection structures or equipment to ensure that the proper capacity is maintained.
- ii. The Discharger shall develop and fully implement a Nutrient Management Plan (NMP) acceptable to this Regional Board. A registered professional engineer, or other qualified individual, shall develop the NMP in accordance with current guidelines established in 40 CFR Part 122.42 and summarized in Section VI.C.3 of this Order. The NMP shall meet the minimum standards established in the NRCS's "Conservation Practice Standard, Nutrient Management, Code 590."

### **b. Manure Management**

- i. Manured areas shall be maintained to prevent nuisance conditions and shall be managed to minimize infiltration of water into underlying soils. The corrals shall be cleaned of excess manure prior to the beginning of the rainy season (October 1).
- ii. The Discharger shall not knowingly contribute to the improper disposal of manure hauled off-site. The manure hauled off the dairy property shall be recorded on manure manifest forms and properly applied or disposed of to ensure that the water quality is not adversely affected in the area.
- iii. Manure applied to cultivated croplands shall be incorporated into the soil soon after application at an agronomic rate, where it will be utilized by the plants in growth rather than passing through the root zone.
- iv. Animals shall be prevented from entering any surface water within the confined area.
- v. As specified in 40 CFR 122.42 (e)(3), prior to transferring manure to other persons, the Discharger shall provide the recipient of the manure with the most current nutrient analysis (required annually as part of the NMP).

### **c. Mortality Handling**

- i. As specified in 40 CFR 412.37 (a)(4), mortalities shall not be disposed of in any liquid manure or process wastewater system, and must be handled in such a way as to prevent the discharge of pollutants to surface water.

**d. Wastewater Management**

- i. The volume of wastewater applied to fields or crop lands shall not exceed the hydraulic loading capacity of the soil and must be consistent with the site-specific NMP and the technical standards specified in 40 CFR 412. Discharges of facility wastewater to fields or crop lands shall not result in surface runoff from disposal fields and shall be managed to minimize percolation to ground water.
- ii. All surface drainage from outside the facility shall be diverted away from any manured areas unless such drainage is fully contained. Drainage from manured areas has to be diverted to the retention ponds.
- iii. The wastewater or waste solids disposal operation shall not cause unusual odors or other nuisance beyond the limits of the dairy property.

**e. Retention Ponds**

- i. Retention ponds shall be lined with, or underlain by, soils which contain at least 10 percent clay and not more than 10 percent gravel or artificial materials of equivalent impermeability.
- ii. Retention ponds shall be designed, constructed and managed to contain (1) the runoff from corrals and other manured areas due to a 25-year, 24-hour storm and (2) all the wastewater generated during the period when land disposal by irrigation cannot be accomplished. The San Diego Region's *Staff Report, Dairy Farm Waste*, recommends a wastewater storage capacity of 60 days. The 60-day storage capacity is needed to retain wastewater during periods when irrigation cannot be performed due to wet weather conditions and during periods of irrigation system maintenance and repair.
- iii. Water levels in the retention ponds shall be sufficiently lowered by October 1, of each year to provide adequate storage capacity prior to the beginning of the wet weather periods. As specified in 40 CFR 412.37 (a)(2), all open surface impoundments must have a depth marker which clearly indicates the minimum capacity necessary to contain the runoff and direct precipitation of the 25 year, 24-hour rainfall event.
- iv. The retention ponds shall be inspected on a weekly basis and all wastewater lines on a daily basis.

**f. Flood Protection**

- i. All waste treatment, containment and disposal facilities shall be protected from inundation or washout by overflow from any stream channel during 100-year peak stream flow.

**g. Surface Drainage**

- i. This confined animal facility shall be designed, constructed and operated to retain all facility wastewater and all precipitation on, and drainage through, manured areas during a catastrophic rainfall event.
- ii. All precipitation and surface drainage outside of manured areas, including that collected from roofed areas, and runoff from tributary areas resulting from a storm of intensity equal to or less than a 25-year, 24-hour storm shall be diverted away from manured areas unless such drainage is fully retained. This Regional Board may waive application of this requirement in specific instances where upstream land use changes have altered runoff patterns such that retention of flood flow is not feasible.

**6. Special Provisions for Municipal Facilities (POTWs Only) (Not Applicable)**

**7. Other Special Provisions (Not Applicable)**

**VII. COMPLIANCE DETERMINATION**

Compliance with effluent limitations or discharge specifications shall be determined as follows:

- A. If only one sample is collected during the time period associated with the effluent limitations (e.g., 30-day average or 6-month median), the single measurement shall be used to determine compliance with the effluent limitation for the entire time period.
- B. All analytical data shall be reported uncensored with detection limits and quantitation limits identified. For any effluent limitation, compliance shall be determined using appropriate statistical methods to evaluate multiple samples. Sufficient sampling and analyses shall be conducted to determine compliance.
- C. Calculations for all limitations that require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this Order or the Monitoring and Reporting Program (Attachment E).
- D. Minimum Levels (MLs), as defined by the SIP, represent the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed. The discharger shall select an analytical procedure for each pollutant for which the analytical procedure's corresponding Minimum Level (ML) is below the applicable effluent limitation. If the effluent limitation is below all the MLs identified for the pollutant in Appendix 4-1 of the SIP, the discharger shall select the lowest ML (and corresponding analytical method).
- E. When determining compliance based on a single sample, with a single effluent limitation which applies to a group of chemicals (e.g. PCBs) concentrations of individual members of the group may be considered to be zero if the analytical response for individual chemicals falls below the MDL for that parameter.

- F. The 6-month median effluent concentration limitation shall apply as a moving median of daily values for any 180-day period in which daily values represent flow-weighted average concentrations within a 24-hour period. For intermittent discharges, the daily value shall be considered to equal zero for days on which no discharge occurred. The 6-month median receiving water limitation shall apply as a moving median of daily values for any 180-day period.
- G. As defined by the U.S. EPA at 40 CFR 122.2, average monthly discharge limitation means the highest allowable average of “daily discharges” over a calendar month, calculated as the sum of all “daily discharges” measured during a calendar month divided by the number of “daily discharges” measured during that month.
- H. As defined by the U.S. EPA at 40 CFR 122.2, average weekly discharge limitation means the highest allowable average of “daily discharges” over a calendar week, calculated as the sum of all “daily discharges” measured during a calendar week divided by the number of “daily discharges” measured during that week.
- I. The daily maximum effluent concentration limitation shall apply to grab samples. The daily maximum receiving water limitation shall apply to grab sample determinations.
- J. The instantaneous maximum effluent concentration limitation shall apply to grab sample determinations. The instantaneous maximum receiving water limitation shall apply to grab sample determinations.
- K. The mass emission rate (MER), in pounds per day, shall be obtained from the following calculation for any calendar day:

$$\text{mass emission rate (lb/Day)} = 8.34 * Q * C$$

in which Q and C are the flow rate in million gallons per day and the constituent concentration in mg/L, respectively, and 8.34 is a conversion factor. If a composite sample is taken, then C is the concentration measured in the composite sample and Q is the average flow rate occurring during the period over which the samples are composited.

- L. Dischargers shall be deemed out of compliance with an effluent limitation or discharge specification if the concentration of the constituent in the monitoring sample is greater than the effluent limitation or discharge specification and greater than or equal to the Minimum Level (ML).